

Benchmark: B.M. # 1254, Chiseled "□" on top of S.E. wingwall of S.N. 054-0070. Elev. 529.26

Existing Structure: S.N. 054-0070 was originally built in 1931 as S.B.I. Route 120 Sec. 101 B & C as a thru truss on closed abutments and solid wall piers on untreated timber piles. In 1979 the original bridge was removed and replaced with a 3-span PPC Deck Beam bridge as FA Route 717 Sec. 101 BR, 223'-0" bk. to bk. abutments, 33'-0" out to out deck. The substructure consists of pile bent abutments on concrete piles and solid wall piers on concrete piles. The existing structure is to be removed and replaced utilizing stage construction.

No Salvage

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET	POST	SHEET NO. 1
F.A.P. 717	101B-1	LOGAN	49	17	23 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

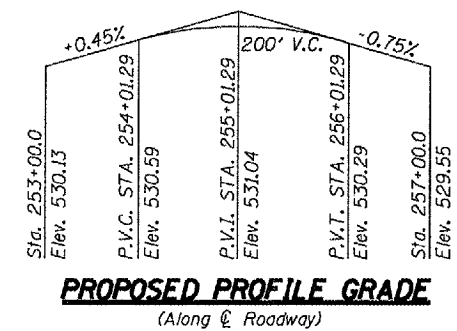
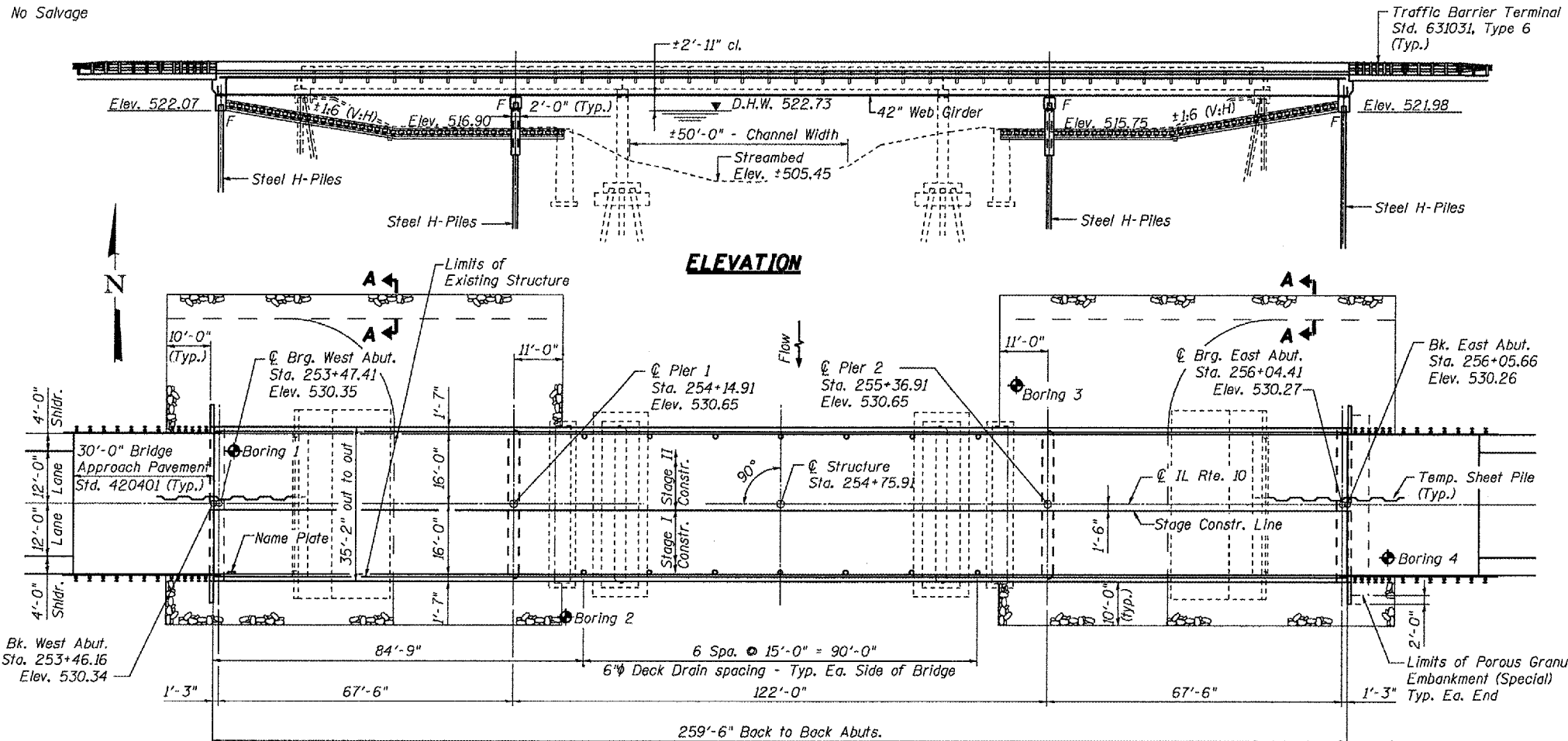
Contract #72A04

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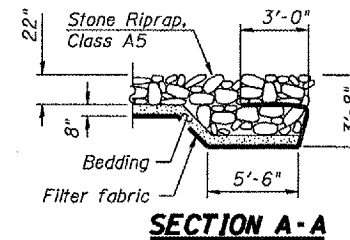
STATION 254+75.91
BUILT BY
STATE OF ILLINOIS
F.A.P. RT. 717 SEC. 101B-1
LOADING HS20
STR. NO. 054-0507

NAME PLATE
See Std. 515001



WATERWAY INFORMATION

Drainage Area = 102 sq. mi.		Exist. Low Grade Elev. 526.79 @ Sta. 262+44		Prop. Low Grade Elev. 529.17 @ Sta. 257+50	
Flood Yr.	Q	Opening Sq. Ft.	Nat. H.W.E.	Head - Ft.	Headwater El.
10	4299	1772	1789	522.10	0.17
Design	50	6545	1893	1913	522.73
Base	100	7498	1942	1965	522.99
Overtopping					
Max. Calc.	500	9776	2036	2061	523.48
					0.71
					0.74
					524.19
					524.22



SCOUR TABLE

Design Scour Elevation (Ft.)	W. Abutment	Pier 1	Pier 2	E. Abutment
	522.07	516.90	515.75	521.98

LOADING HS20-44

Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

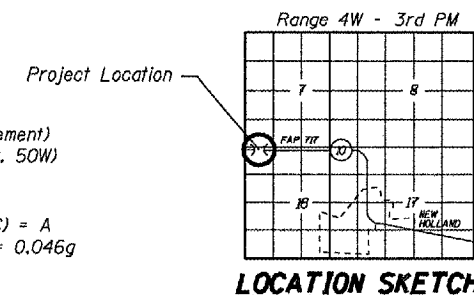
2002 AASHTO

DESIGN STRESSES

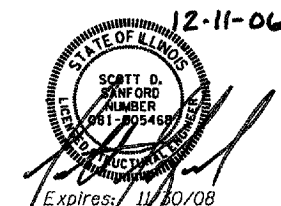
FIELD UNITS
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)
 $f_y = 50,000$ psi (M270 Gr. 50W)

SEISMIC DATA

Seismic Performance Category (SPC) = A
 Bedrock Acceleration Coefficient (A) = 0.046g
 Site Coefficient (S) = 1.5



DESIGNED	D.J.T. & S.D.S.
CHECKED	J.J.P. & S.D.S.
DRAWN	L.M.G. & D.L.H.
CHECKED	D.J.T. & S.D.S.



APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

GENERAL PLAN & ELEVATION
IL ROUTE 10 OVER PRAIRIE CREEK
F.A.P. ROUTE 717 - SECTION 101B-1
LOGAN COUNTY
STATION 254+75.91
STRUCTURE NO. 054-0507